

# ACD Performance Card

Model type: Classification, 4000 data points

## Accuracy = 0.50800000

Accuracy is the fraction of predictions the model got right. Accuracy has a range of 0 to 1. This may be a deceptive metric as the model could perform best for one class and this metric masks the performance of the other. It is best used alongside precision and recall.

## Precision = 0.52373737

Precision is the ratio between the number of positive cases and the total number of cases classified as positive. Precision is closest to one when the model maximizes correct positive classifications (true positives) and minimizes incorrect positive classifications (false positives.)

## Recall = 0.50290980

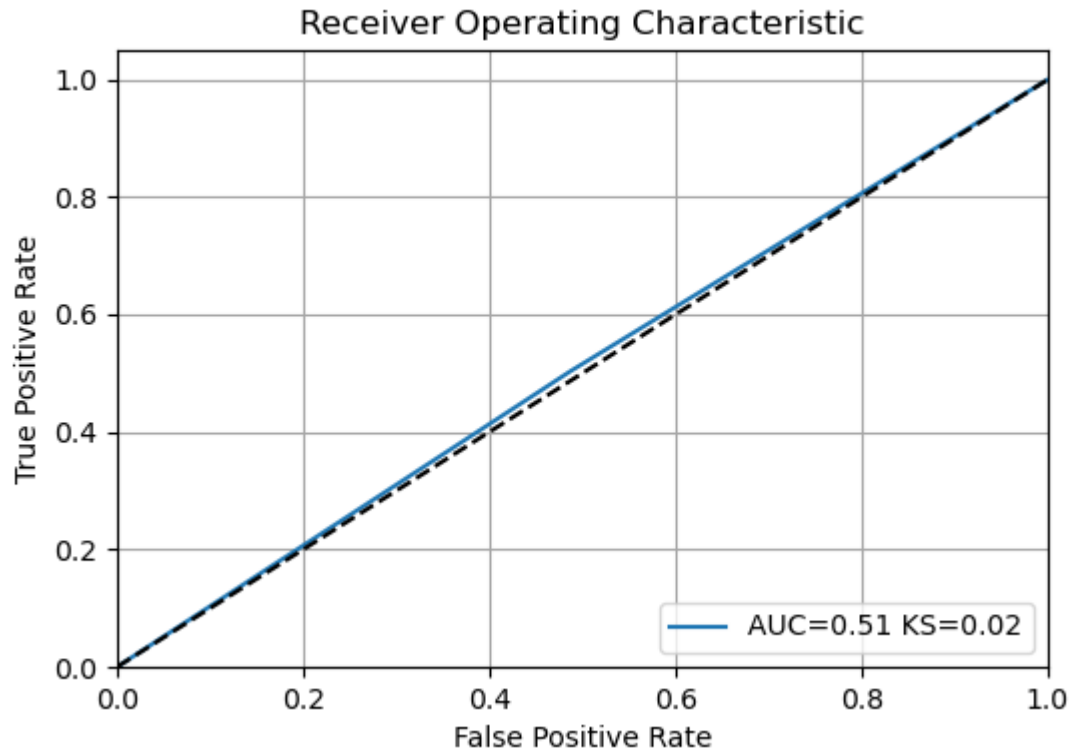
Recall is the fraction of true positives over the total number of positive cases. When recall is high, more positive cases were detected. This metric is 1 when false negatives are 0. Thus, one can trust the model to detect positives.

## F-1 = 0.51311232


F1 is the harmonic mean of precision and recall with the goal of combining the two into one metric to work well on imbalanced data. Often, one has to pick a single metric to optimize based on their use case and F1 allows both recall and precision to be optimized.

## AUC = 0.50816284

Area Under the Curve (AUC) refers to the Receiver Operating Characteristic (ROC) curve. This curve shows the performance of a classification model and the AUC shows the measure of across all classification thresholds. AUC ranges from 0 to 1 with 1 being perfect performance and .5 being due to chance.




	Housing_Type				
	Accuracy	Precision	Recall	F1	AUC
Condominium	0.50250	0.53553	0.49531	0.51463	0.50300
Semi-Detached	0.54000	0.53545	0.55164	0.54342	0.54009
Apartment	0.51500	0.52618	0.51589	0.52099	0.51498
Multi Family	0.48250	0.49869	0.46005	0.47859	0.48325
Single Family	0.50000	0.52152	0.49400	0.50739	0.50027

<div>  </div>	State				
	Accuracy	Precision	Recall	F1	AUC
GA	0.56250	0.61538	0.54545	0.57831	0.56439
FL	0.48750	0.48780	0.50000	0.49383	0.48750
DE	0.51250	0.48780	0.52632	0.50633	0.51316
CT	0.55000	0.51429	0.48649	0.50000	0.54557
CO	0.52500	0.63333	0.41304	0.50000	0.54476
CA	0.45000	0.44737	0.42500	0.43590	0.45000
AR	0.52500	0.51282	0.51282	0.51282	0.52470
AZ	0.46250	0.56250	0.38298	0.45570	0.47937
AK	0.40000	0.35897	0.37838	0.36842	0.39849
AL	0.52500	0.56757	0.48837	0.52500	0.52797

State	State				
	Accuracy	Precision	Recall	F1	AUC
MD	0.45000	0.47619	0.47619	0.47619	0.44862
MA	0.50000	0.56410	0.48889	0.52381	0.50159
LA	0.55000	0.48780	0.57143	0.52632	0.55238
KY	0.51250	0.58974	0.50000	0.54118	0.51471
KS	0.43750	0.48649	0.40909	0.44444	0.44066
IA	0.51250	0.47917	0.62162	0.54118	0.52011
IN	0.37500	0.38462	0.36585	0.37500	0.37523
IL	0.40000	0.43902	0.41860	0.42857	0.39849
ID	0.55000	0.48780	0.57143	0.52632	0.55238
HI	0.51250	0.54167	0.60465	0.57143	0.50503

X	State				
	Accuracy	Precision	Recall	F1	AUC
NJ	0.52500	0.51163	0.56410	0.53659	0.52595
NH	0.56250	0.60417	0.64444	0.62366	0.55079
NV	0.61250	0.63889	0.56098	0.59740	0.61382
NE	0.50000	0.51282	0.48780	0.50000	0.50031
MT	0.62500	0.73684	0.58333	0.65116	0.63542
MO	0.55000	0.54545	0.60000	0.57143	0.55000
MS	0.47500	0.51220	0.48837	0.50000	0.47392
MN	0.50000	0.51163	0.53659	0.52381	0.49906
MI	0.50000	0.47619	0.52632	0.50000	0.50125
ME	0.47500	0.46809	0.56410	0.51163	0.47717

	State					
	Accuracy	Precision	Recall	F1	AUC	
	SC	0.51250	0.45946	0.47222	0.46575	0.50884
	RI	0.52500	0.62500	0.43478	0.51282	0.54092
	PA	0.45000	0.51111	0.51111	0.51111	0.44127
	OR	0.47500	0.53846	0.46667	0.50000	0.47619
	OK	0.51250	0.48276	0.36842	0.41791	0.50564
	OH	0.52500	0.50000	0.39474	0.44118	0.51880
	ND	0.56250	0.64583	0.63265	0.63918	0.54213
	NC	0.48750	0.55000	0.48889	0.51765	0.48730
	NY	0.58750	0.61111	0.53659	0.57143	0.58881
	NM	0.43750	0.44186	0.47500	0.45783	0.43750

State	State				
	Accuracy	Precision	Recall	F1	AUC
WY	0.45000	0.50000	0.50000	0.50000	0.44444
WI	0.56250	0.52500	0.56757	0.54545	0.56285
WV	0.53750	0.55263	0.51220	0.53165	0.53815
WA	0.56250	0.55556	0.62500	0.58824	0.56250
VA	0.50000	0.40541	0.45455	0.42857	0.49323
VT	0.50000	0.47222	0.44737	0.45946	0.49749
UT	0.51250	0.54762	0.53488	0.54118	0.51069
TX	0.53750	0.55556	0.48780	0.51948	0.53877
TN	0.58750	0.61538	0.57143	0.59259	0.58835
SD	0.45000	0.48649	0.41860	0.45000	0.45255

	ACD_IMG_DATE				
	Accuracy	Precision	Recall	F1	AUC
2-3-12	0.48400	0.53333	0.49455	0.51321	0.48283
10-2-12	0.51200	0.51261	0.48800	0.50000	0.51200
9-9-14	0.51000	0.50204	0.50000	0.50102	0.50984
4-7-20	0.48200	0.51210	0.47925	0.49513	0.48218
4-8-19	0.52600	0.56574	0.52593	0.54511	0.52601
1-5-15	0.53400	0.55804	0.48263	0.51760	0.53592
6-7-17	0.47800	0.45283	0.50847	0.47904	0.47962
10-1-18	0.53800	0.55906	0.54406	0.55146	0.53772